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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/598,526	10/20/2006	Andre Luis Martins	04304/0205369-US0	6929
7278	7590	08/18/2009		
DARBY & DARBY P.C. P.O. BOX 770 Church Street Station New York, NY 10008-0770			EXAMINER PAUL, ANTONY M	
			ART UNIT 2837	PAPER NUMBER
			MAIL DATE 08/18/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/598,526	Applicant(s) MARTINS, ANDRE LUIS	
	Examiner ANTONY M. PAUL	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 thru 13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 2 thru 13 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 01 September 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>09/01/2006</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the digital to analog converter 8 (see Pub. 20070170879, Para. [0013], lines 14-15, fig.1) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

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Claim Rejections – 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claim 1 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Foureys (6,633, 149).

Claims:	Foureys teaching:
<p>Claim 1: A method of controlling the speed of an electric motor powered by a triac to maintain a preset speed,</p> <p>by varying the electrical angle at which the triac is 5 triggered, characterized in that it comprises the steps of:</p> <p>producing a signal related to the first derivative of the motor speed;</p> <p>producing a signal related to the difference in value between the motor current speed and the preset speed (Error P); and</p>	<p>Applicants' teach this as well known in the art (see Pub. 20070170879, Para. [0003] & [0012], lines 3-10). Foureys teach a method of controlling a universal motor 2 (fig.1) powered using a Triac 5 to control the speed of rotation of said motor 2 at a desired reference speed ω_c,</p> <p>Triac 5 (fig.1) is triggered using the triggering angle α (fig.2; col. 1, lines 17-32; col. 3, lines 26-29 & col. 8, lines 56-57) and varying the electric angle read on to modifying the triggering angle of the triac 5 (see col. 9, lines 44-46), comprising:</p> <p>A tachometer 3 produce a speed signal ω (fig.1) and the derivative of the speed ω is $d\omega/dt$ (see col. 3, lines 42-45);</p> <p>The speed difference signal $\omega - \omega_c$ produced at the output of subtractor 7 (fig.2) is the difference between actual measured speed ω of the motor 2 and the preset speed such as the reference speed ω_c (determining difference, see col. 2, lines 14-20); and</p>

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<p>producing a control signal based on said first derivative related signal and said Error P related signal to adjust the triac electrical triggering angle to operate the motor at the preset speed</p>	<p>Control circuit 4 produce a control signal such as the voltage signal V (figs.2-3) and control the speed of the motor 2 using the the triggering angle α of the triac 5, which is derived based on the control signal V and said triggering angle α is modified based on the speed error signal such as the speed difference signal $\omega - \omega_c$ and also based on the actual speed signal ω, which has a derivative relation $d\omega/dt$ as explained above.</p>
	<p>Fourey's do not mention producing the control signal based on an error related signal. It is obvious that the error is the speed difference signal $\omega - \omega_c$, used to produce a voltage control signal V supplied to the motor 2 (fig.1).</p>
	<p>It would have been obvious to one of ordinary skill in the art at the time the invention was made to produce a control signal based on an error signal because a triggering angle is derived and modified based on the speed difference signal so that the current supplied is reduced and controlled to an acceptable value (see col. 9, lines 44-48).</p>

Allowable Subject matter

Claims 2 thru 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ANTONY M. PAUL whose telephone number is

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(571)270-1608. The examiner can normally be reached on Mon - Fri, 7:30 to 5, Alt. Fri, Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Benson Walter can be reached on (571) 272-2227. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/BENTSU RO/
Primary Examiner, Art Unit 2837

/Antony M Paul/
Examiner, Art Unit 2837

08/14/2009